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**THE SUPPORTED COMMANDER IN HIGH INTENSITY ANTI-ACCESS
MARITIME CONFLICT**

by

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Major, USAF

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Abstract

Both U.S. Air Force and U.S. Navy service doctrines take a parochial and dogmatic approach to joint operations in the maritime environment, with both services claiming their service or associated functional component should earn the title “supported commander”. However, when measured against the backdrop of maritime conflict with a near-peer adversary conducting high intensity anti-access warfare, both services’ beliefs lose legitimacy. This paper argues that to best leverage joint force capabilities against such an adversary, the joint force commander should initially name the JFACC as the supported commander, but with the specific objective of neutralizing the adversary’s *maritime* anti-access capability. With this accomplished, command relationships should shift and the JFMCC should be named supported commander, with the objective of seeking a decisive engagement against the adversary’s maritime forces to achieve the joint force commander’s campaign objectives. Based on this conclusion, this paper recommends future courses of action for both the Navy and the Air Force to make the operational situation more tenable, and concludes with recommendations to joint force commanders to manage shifts in command relationships.

INTRODUCTION

The establishment of command relationships is one of the most important and consequential decisions a joint force commander (JFC) can make. These relationships determine which functional or service component commander will set the overall priorities, timing, and operational design of the entire joint campaign. It is therefore imperative that the JFC consider carefully his overall operational concept, competing priorities of the component commanders, and ability of the components to achieve joint force objectives when determining which component commander will be the supported commander. Not surprisingly, the different services have preemptively made their cases why their service, or the functional component most closely aligned with their service, should lead the joint effort and why their officers should earn the title “supported commander”. Recently, controversy has arisen over the concept of the supported commander in future maritime conflict. This began with the publication by the U.S. Air Force of the following statement in Air Force Doctrine Document (AFDD) 2-1.4 *Countersea Operations* on the subject of supported and supporting relationships

For air operations in the maritime environment where airpower is providing the joint force commander’s intended effect or is the primary combat arm, the Joint Forces Air Component Commander (JFACC) should be the supported commander. While capable of serving as a supporting commander to the Joint Forces Maritime Component Commander (JFMCC), this command relationship dilutes the disproportionate effects airpower can have for the joint force commander.¹

For its part, the U.S. Navy, through the Commander of the Pacific Fleet’s (COMPACFLT) 2007 document “Navy Joint Principles”, counters this view, claiming that

Joint operations in the maritime domain are most often assigned to the Maritime Component Commander as the “supported commander”. This is

¹ Commander, Curtis E. LeMay Center for Doctrine Development and Education, *Countersea Operations*, Air Force Doctrine Document (AFDD) 2-1.4 (Maxwell Air Force Base, AL: Air Force Doctrine Center, 2005), 12.

because the Maritime Component maintains the most comprehensive situational awareness of what is going on throughout his domain, possesses the preponderance of assets that operate in the maritime domain, and is optimized across its forces for multi-dimensional maritime operations.²

These seemingly diametrically opposed views of the Air Force and Navy, when examined against the harsh reality of modern high intensity conflict, may be victims of their own dogmatism, and as was the case in the age-old argument between air power and land warfare advocates, both extreme views may “miss the mark”.³ Therefore, it is important to understand how each service arrived at their particular viewpoint, and then examine their beliefs against the backdrop of war against a modern, committed, and capable “near peer” adversary conducting high intensity anti-access warfare in the maritime environment. This examination will reveal that both services’ divisive viewpoints suffer from flaws of logic that cannot be ignored, and do little to aid the JFC in determining supported and supporting command relationships. In the end, the operational environment will require the JFC adapt his command relationships as the campaign progresses. **Due to the nature of high intensity anti-access maritime warfare, the JFC should initially name the JFACC as the supported commander, with the main objective of defeating or disrupting the enemy’s maritime anti-access capability. With this accomplished, and the joint force able to seize the initiative, the JFC should transfer supported commander responsibilities to the JFMCC, to decisively engage and defeat the enemy’s maritime force.**

² Commander, United States Pacific Fleet, “Navy Joint Principles”, *CPF Executive Leadership Training Symposium* (Pearl Harbor, HI: COMPACFLT, 2007), 3.

³ Stephen L. Canby and Kenneth S. Brower of the Air Power Research Institute, rejoinder to Martin Van Creveld, author of *Air Power and Maneuver Warfare*, (Maxwell Air Force Base, AL: Air University Press, 1994) 222-223; and quoted by Benjamin Lambeth in *The Transformation of American Air Power*, (Ithaca, NY: Cornell University Press, 2000), 296.

BACKGROUND

As mentioned above, a brief examination of the Air Force's and Navy's doctrine and beliefs is necessary. From the Air Force's point of view, "Air power is indivisible. If you split it up into compartments, you merely pull it to pieces and destroy its greatest asset – its flexibility."⁴ Furthermore, airpower advocates believe they are the only true experts of the air and space domain, that air and space superiority is the first requirement for success in any military operation, and that a mere passing understanding of airpower is insufficient to leverage its synergistic effects across the entire battlespace.⁵ To this end, the Air Force has made significant strides in the development of the JFACC concept and the establishment of the Combined/Joint Air Operations Center (C/JAOC) to provide the JFACC with the command and control (C2) measures necessary to manage and employ air forces from multiple services and countries.⁶ These efforts shared the common objective of retaining functional control of air operations under a single air component commander – usually an Air Force general. This concept has enjoyed great success in the four major military operations – Desert Shield/Storm, Allied Force, Enduring Freedom, and Iraqi Freedom – since the passage of the Goldwater-Nichols Act of 1986 mandating joint military operations, and the Air Force is keen to see this concept extended to future joint campaigns. Finally, as we have seen in published Air Force doctrine, airpower advocates reject the notion that airpower should be automatically subordinated to a maritime commander in a maritime conflict, particularly if

⁴ Bernard Montgomery, Field Marshal, quoted in Chairman of the Joint Chiefs of Staff, *Command and Control for Joint Air Operations*, Joint Publication (JP) 3-30 (Washington, DC: CJCS, 2003), para 1.

⁵ Raymond E. Johns, Jr., and Bruce Hanessian, "Domain Expertise and Command and Control", *Joint Forces Quarterly*, no. 49 (2nd Quarter 2008): 46 and 48.

⁶ Dr. Stephen O. Fought, "The Tale of the C/JFACC, A Long and Winding Road", *Air and Space Power Journal* (Winter 2004), 5.

airpower is accomplishing the weight of the JFC's effort or if airpower's responsibilities extend beyond the context of the maritime operation.⁷

In contrast, the Navy believes the maritime domain, which the Navy claims includes the airspace above it, is the Navy's domain and the "preponderance of the effort to attain and maintain maritime superiority...lies with the maritime component and his Navy forces."⁸ With regard to direct kinetic engagement with the enemy, the Navy maintains that naval surface fires, cruise missile strikes, and strike/fighter aircraft project power across the maritime environment and overland.⁹ Furthermore, the Navy believes the JFMCC's forces are optimized to provide the JFC with the most comprehensive C2 of friendly forces and situational awareness across the maritime domain, and that this capability far exceeds that of other components.¹⁰ Finally, the Navy asserts that "the preponderance of mission assets in an operation in the maritime environment involving joint force airpower almost always resides with the JFMCC."¹¹

In further support of the Navy's doctrinal beliefs, the lessons of the immediate past must be tempered and qualified. Since the Goldwater-Nichols Act of 1986, all major military operations undertaken by the joint force have been overland campaigns. While it is true one of these operations, Allied Force, did not involve a significant land effort, all of these campaigns took place primarily overland, and it was a foregone conclusion the maritime component would be supporting the main effort, be that air or land. The Navy is justified in advising caution in applying our past successes as a framework for future joint command

⁷ Lemay Center, *Countersea Operations*, 12; and James A. Winnefeld and Dr. Dana J. Johnson, *Joint Air Operations, Pursuit of Unity in Command and Control, 1942-1991* (Annapolis: Naval Institute Press, 1993), 149.

⁸ COMPACFLT, "Navy Joint Principles", 1.

⁹ Ibid., 2.

¹⁰ Ibid., 4.

¹¹ Ibid., 5.

relationships, and many in the joint force agree. In fact, the Air Land Sea Application (ALSA) Center, in their *Multi-Service Tactics, Techniques, and Procedures for Air Operations in Maritime Surface Warfare*, assumes the JFMCC will be the supported commander.¹² Others are quick to point out that the recent successes of the JFACC concept may be more attributable to an overwhelming abundance of air assets and a monopoly of initiative rather than the streamlined, synergistic effect of joint airpower control, and that future conflict with more competent adversaries may test our concepts of the best use of airpower.¹³

HIGH INTENSITY WARFARE AND THE ANTI-ACCESS STRATEGY OF THE NEAR-PEER ADVERSARY

With respect to maritime conflict, the doctrinal beliefs of both the Navy and the Air Force are irrelevant if they cannot withstand the reality-based litmus test of high intensity anti-access warfare. It is therefore important that the nature of such warfare be described in detail, so the doctrines described above can be measured against it. Also, the term “high intensity warfare” bears some explanation. High intensity warfare involves conflict with an adversary capable of direct and catastrophic kinetic and non-kinetic measures against all aspects of the joint force, holding at risk not only assets at the tactical level but also capital ships at sea, forward operating bases, space-based assets, cyberspace networks, and the U.S. homeland *simultaneously*. Arguably, the United States has not faced this caliber of adversary since World War II. For the purposes of this discussion, the notional adversary in question is

¹² Air Land Sea Application Center, *Air Operations in Maritime Surface Warfare*, (Langley Air Force Base, VA: Air Land Sea Application Center, November 2008), vii.

¹³ Jeffrey E. Stambaugh, "JFACC: Key to Organizing Your Air Assets for Victory", *Parameters*, U.S. Army War College Quarterly, Summer 1994, 100.

China, given their rapid force modernization, overt maritime strategic objectives, and implementation of anti-access capabilities and doctrine.

China's Anti-Access Strategy

In many ways, the U.S. joint force has become the victim of its own success. Global power projection and overwhelming defeat of conventional forces have characterized the American way of war in the modern era. However, keen observers have concluded the best way to confront the United States and its allies is to prevent them from bringing their superior military force to bear. The best way to accomplish this is through anti-access measures that deter U.S. involvement or delay the arrival of U.S. air and naval forces, thus allowing the aggressor state to achieve short term regional objectives.¹⁴ The overall result, according to one RAND Corporation study, would be the defeat of the U.S., “not in the sense that the U.S. military would be destroyed but in the sense that [the aggressor state] would accomplish its military and political objectives while preventing the United States from accomplishing ...its ...objectives.”¹⁵ To this end, China’s President Jiang Zemin directed the People’s Liberation Army (PLA) in 1993 to develop the capability to execute “local wars under high technology conditions”.¹⁶ Furthermore, the Chinese are undeterred in the face of a technologically superior adversary, stating

If China confronts an enemy with high technology and superior equipment in a local war, it is impossible that the enemy would also have comprehensive superiority in politics, diplomacy, geography, and support.¹⁷

¹⁴ Ronald O'Rourke, *China Naval Modernization: Implications for U.S. Navy Capabilities -- Background and Issues for Congress*, Foreign Affairs, Defense, and Trade Division Report, Congressional Research Service (Washington, DC, 19 November 2008), 7.

¹⁵ Roger Cliff, Mark Burles, Michael S. Chase, Derek Eaton, and Kevin L. Pollpeter, *Entering the Dragon's Lair: Chinese Antiaccess Strategies and Their Implications for the United States*, Project Air Force Report, RAND Corporation (Arlington, VA, 2007), xvii.

¹⁶ Ibid., 21.

¹⁷ Ibid., 27, RAND authors' translation

Also, the Chinese believe firmly that the superior adversary's will to fight will be a key center of gravity, noting that

Since the end of the Second World War, in the majority of wars in which the side with inferior equipment has defeated an enemy with superior equipment, the inferior side has won a relative military victory, compelling the superior enemy to stop fighting or to retreat from the battlefield.¹⁸

Finally, China will not hesitate to extend its anti-access efforts to space and information operations. China has correctly determined that U.S. forces have an over-reliance on broadband C2 systems, and specifically mention these systems as targets of electronic jamming and cyber attack, hoping to deny U.S. forces the initiative and isolate them from leadership.¹⁹ This concept extends to space operations, with the Chinese noting "military satellites will become targets for attack" in an attempt to disrupt U.S. C2 capabilities, describing attack on U.S. space systems as "an irresistible and most tempting choice."²⁰

While the overarching objectives of this anti-access effort are operationally and strategically sound, more important to the test of Air Force and Navy doctrine, and to the establishment by the JFC of command relationships, is the particular methods the Chinese plan to use to implement their strategy. These methods manifest themselves in the form of challenges and threats to surface operations, subsurface operations, and air operations.

Challenges and Threats to Surface Operations

Of all of the advances in Chinese military capability, none is a greater threat to the American way of war than the advanced conventional ballistic missile. This threat manifests itself in the maritime environment in the form of the indigenously produced Dong Feng 21 (DF-21) series of anti-ship ballistic missiles (ASBM). These missiles, which have a range of

¹⁸ Ibid., 43, RAND authors' translation

¹⁹ Ibid., 45.

²⁰ Ibid., 57-58.

over 1,500 nautical miles (NM)²¹, employ advanced countermeasures such as maneuvering re-entry vehicles (MaRVs), and could exceed the capability of current ballistic missile defense (BMD) systems designed to defend large radar cross section ships of carrier and expeditionary strike groups.²² Not only are these weapons difficult to defeat, their effect on a large deck aircraft carrier would be devastating, virtually guaranteeing at least a mission kill of an aircraft carrier's airpower projection capability.²³ These weapons, when augmented by the PLA's extensive sea surveillance and targeting assets such as over-the-horizon radar (OTHR),²⁴ would essentially force U.S. aircraft carriers to remain outside of ASBM range, far exceeding the capability of an unrefueled F-18E/F to conduct combat operations in the vicinity of Taiwan.²⁵

The Chinese threat to U.S. surface operations extends beyond the targeting of aircraft carriers. Though destroyers, cruisers, and frigates have smaller radar cross sections than aircraft carriers, and are thus less likely to be targeted by ASBMs, they would run the gauntlet of Chinese layered sea-denial defenses, consisting of advanced anti-ship cruise missiles (ASCMs) launched from not only major surface combatant vessels but also tactical aircraft and small, fast, and difficult to counter Houbei guided missile patrol boats operating in the littorals and open ocean.²⁶ With regard to cruise missile attack, the Chinese Navy is well aware of the U.S. Navy's Aegis air defense system, and plans to overwhelm air defense

²¹ United States Naval Institute (July 2006), 1.

²² Ibid., 1; RAND (Cliff et al.), *Entering the Dragon's Lair...*, 93; O'Rourke, *China Naval Modernization...*, 79-80; and "Chinese Develop Special 'Kill Weapon' to Destroy U.S. Aircraft Carriers", (U.S. Naval Institute, 31 March 2009).

²³ Xin-qi Li, Guo-hua Niu, Ming-hai Wang, and Ming-jun Luo, "Pixel-simulation Study on Damage Efficiency of Carrier Plane Groups under Attacking of Submunition", *Journal of System Simulation*, 20, no. 11 (June 2008): 3062; and U.S. Naval Institute, "Chinese Develop Special 'Kill Weapon'...".

²⁴ RAND (Cliff et al.), *Entering the Dragon's Lair...*, 90.

²⁵ The combat radius of the F-18E/F is 390NM and 410NM in the maritime interdiction and counterair roles, respectively, according to the Federation of American Scientists.

²⁶ O'Rourke, *China Naval Modernization...*, 8-10, 23; Professor William Murray, "China-Taiwan Case Study" (lecture, Naval War College, Newport, RI, 6 April 2009).

vessels with large waves of Harpy anti-radiation weapons designed to home on the Aegis system's SPY-1 radar. This attack would then be augmented with swarms of advanced ASCMs such as the SS-N-27 Sizzler, SS-N-22 Sunburn, and the indigenously produced YJ-83.²⁷ Additionally, the Chinese Navy operates a large fleet of advanced submarines, capable of not only ASCM attack but also employment of wake-homing torpedoes that are difficult to counter.²⁸ The net effect of these anti-access measures is the U.S. surface fleet would be forced beyond its operational reach. Aircraft carriers would be pushed eastward by the ASBM threat far beyond their ability to project airpower. Furthermore, smaller vessels such as destroyers could easily be made defensive by China's layered maritime defenses, and could operate closer than the carriers only at tremendous risk. A geographic representation of the impact of Chinese anti-access measures is shown below in Figure 1.

²⁷ O'Rourke, *Chinese Naval Modernization...*, 10, 23, and 51; and Foreign Broadcast Information Service "PRC: Joint Tactics for Destroying 'Aegis', 'Arleigh Burke' Described" (April 9, 2003), reflected in the RAND study (Cliff et al.), 76.

²⁸ O'Rourke, "*Chinese Naval Modernization...*", 10.



Figure 1: The Chinese Anti-Access Umbrella²⁹

While U.S. Navy's surface forces face significant challenges of direct attack, submarine forces must contend with challenges of a different nature.

Threats and Challenges to Subsurface Operations

The U.S. Navy's submarine force enjoys an undeniable advantage over their Chinese counterparts in terms of vessel capability, service doctrine, and crew training and experience. However, these advantages may prove difficult to leverage in a conflict with China. One must remember that the objectives of the Chinese, with regard to military action against Taiwan, are purely littoral, and that the U.S. Navy's submarine force was designed for open-ocean operations against a blue water naval power, the Soviet Union. Operating large, nuclear-powered submarines in shallow waters brings with it its own set of challenges,

²⁹ RAND (Cliff et al.), "Entering the Dragon's Lair...", 112.

regardless of the threat. While the specific limitations of U.S. submarine sensors and weapons in shallow waters exceed the classification level of this discussion, the overarching effect of littoral operations are simple enough to deduce. For example, at periscope depth, a U.S. hunter-killer submarine (SSN) draws 63 feet of water to the bottom on the keel.³⁰ In 20 fathoms (120 feet) of water this submarine has only 57 feet of water between the keel and the ocean floor. This leaves the submarine with almost no maneuvering room to dive to evade threats, not to mention its vulnerability to visual detection from aircraft operating in its vicinity. In addition, operations in shallow waters leave submarines vulnerable to mining, a capability the Chinese have been keen to perfect.³¹ Initially, the challenges posed to submarines by the littoral environment may not seem like a significant concern, given the vast stretches of deep water in the Pacific. However, as Figure 2 below shows, submarine operations within the Taiwan Strait will be anything but unrestricted.

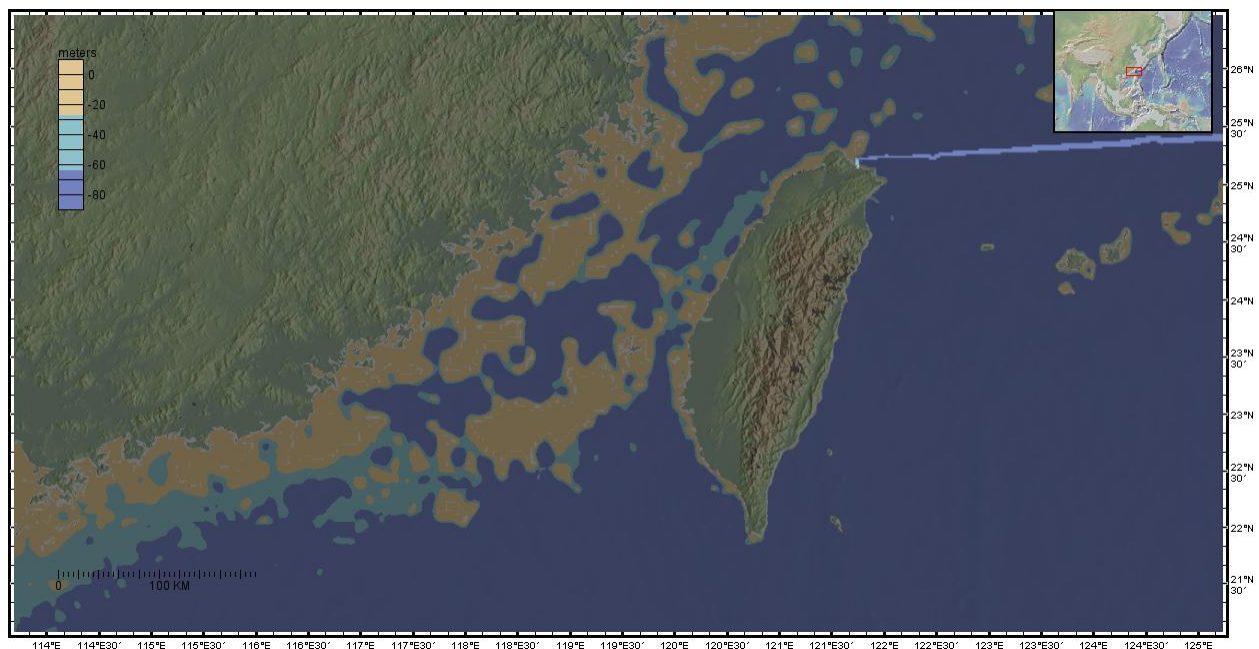


Figure 2: Bathymetry of the Taiwan Strait and Surrounding Waters³²

³⁰ Submariner Nicolas Bogaard, United States Navy, interviewed by the author, 1 April 2009.

³¹ Murray, “China-Taiwan Case Study”, 6 April 2009.

³² Created with Virtual Ocean, developed by William F. Haxby, Andrew K. Melkonian, Justin Coplan, and William B.F. Ryan, and funded by the National Science Foundation and Trustees of Columbia University.

In Figure 2, all the areas shown in orange are 20 fathoms or less, and cover roughly half of the area of the Taiwan Strait. Thus, one can clearly see that U.S. submarine operations in the Taiwan Straits will be severely limited, and the ability of U.S. SSNs to conduct maritime interdiction of Chinese surface forces or amphibious assault forces will be diminished. This limitation is not lost on the Chinese, who cite superiority in geography as one leverage point to use against an adversary of superior technology.³³

It should be noted, however, that while U.S. submarines may not be able to directly interdict enemy surface forces in much of the Taiwan Strait, their ability to initiate land attack via cruise missile strike will be mostly unhampered, as there are ample deep water bastions away from the Taiwan Strait for SSNs and SSGNs (guided missile nuclear attack submarines) to use to avoid detection and conduct strikes unopposed. Even so, the maritime component is left with little force to bring to bear against the adversary, and what force is available takes the form of an airborne weapon, which, like other forms of airpower, will face its own challenges.

Threats and Challenges to Air Operations

The Chinese anti-access umbrella represented in Figure 1 affects not only maritime forces but also land-based airpower. The same technology used in the DF-21 ASBM, which enables its survivability against BMD efforts, has proliferated to land-attack conventional ballistic missiles, which can reach U.S. bases on Okinawa and mainland Japan.³⁴ Furthermore, improvements in ballistic missile accuracy and development of submunition-dispensing warheads have made Chinese conventional ballistic missiles ideal for attacks on

³³ RAND (Cliff et al.), *Entering the Dragon's Lair*... 27. Full quote cited previously in this paper.

³⁴ RAND (Cliff et al.), *Entering the Dragon's Lair*... 62-64; and O'Rourke, *China Naval Modernization*..., 50.

large airbases with vast areas of unprotected aircraft.³⁵ Nor are the Chinese deterred at the prospect of attacking the territory of a U.S. ally such as Japan, stating that they would have “a totally legitimate reason to attack the enemy...on [a] third country’s territory.”³⁶

Combined with more traditional threats such as air-launched cruise missiles, the Chinese anti-access efforts may succeed in rendering bases such as Kadena Air Base on Okinawa unusable, forcing land based airpower to relocate to bases outside of the Chinese ballistic missile reach. Here sea-based airpower has an advantage, as aircraft carriers can operate right to the edge of the ballistic missile threat’s range, whereas land-based airpower must relocate to the next available facility, which may be as far away as Guam.

In addition to the challenges of basing and operational reach, all airpower (land- or sea-based) must contend with an advanced integrated air defense system (IADS) designed to prevent air operations in the Taiwan Strait, using advanced land-based surface to air missile (SAM) systems such as the S-300PMU2 as well as sea-based missile systems like the SA-N-20 and HHQ-9 systems deployed aboard Chinese Navy Luzhou and Luyang II destroyers.³⁷ Furthermore, the Chinese air force and naval air force have deployed an alarming number of advanced 4th-generation fighter aircraft equipped with highly capable avionics and weaponry, posing a threat to both U.S. fighter aircraft and more vulnerable intelligence, surveillance, and reconnaissance (ISR) assets.³⁸ The net effect of these measures is that airpower, whether land- or sea-based, will be forced to operate from hundreds of miles away in a highly contested environment, supported by an antiquated aerial refueling fleet stretched thin, thus limiting the overall amount of aircraft that the U.S. can

³⁵ RAND (Cliff et al.), *Entering the Dragon’s Lair...* 81-83.

³⁶ Ibid., 64, RAND authors’ translation.

³⁷ Ibid., 85, and O’Rourke, *China Naval Modernization...*, 23-24.

³⁸ O’Rourke, *China Naval Modernization...*, 8.

bring to bear. Air superiority will be hard won and short lived, and any air strikes that can be executed will occur over finite periods of time, as opposed to the around-the-clock air strikes that have characterized conflicts of the recent past.

SERVICE DOCTRINE REVISITED

When measured against the backdrop of high-intensity anti-access warfare with a near-peer adversary, the doctrines of the Navy and Air Force begin to lose impact. As Rear Admiral James Winnefeld and Dr. Dana Johnson observe

Service doctrine and traditions are a two-edged sword: they provide a rationale and a way to fight, but they are a detriment when they are considered superior to either joint doctrine or...the joint commander's plan.³⁹

With regard to the doctrine set forth in "Navy Joint Principles", the Maritime Component Commander in the conflict described above will not, in fact, have the most comprehensive situational awareness of the battlespace, nor will he possess the preponderance of assets directly involved in the conflict. ASBMs, ASCMs, and sub-surface threats will keep the JFMCC's surface fleet well removed from direct conflict, and geographic constraints in the littorals will severely hamper the effectiveness of his subsurface forces. The overall effect of this is the JFMCC will be unable to bring his sensors, forces, and elaborate C2 network to bear, despite the fact that this network may be the best optimized for maritime joint operations. And as airpower advocates argue, "to be successful, we must have the ability to exercise command and control."⁴⁰

But Air Force doctrine, when measured against high-intensity maritime conflict, is not without flaw either. While the Air Force maintains the JFACC should be the supported commander as long as airpower is accomplishing the weight of the JFC's effort, it is hardly

³⁹ Winnefeld and Johnson, *Joint Air Operations...*, 157.

⁴⁰ Johns and Hanessian, "Domain Expertise...", 45.

likely the JFC's overall operational objective, deterrence or destruction of the enemy's fleet, can be accomplished by airpower spread thin and operating from hundreds, if not thousands, of miles away. Land-based airpower is particularly limited in this regard, as the Air Force has minimal fielded capability to destroy moving targets at sea in adverse weather.⁴¹ Furthermore, joint (land- and sea-based) maritime air support doctrinally requires air superiority and effective suppression of enemy air defense (SEAD), both of which are questionable, and non-permissive air interdiction of maritime targets (AIMT) is not only difficult to accomplish but also involves significant risk to tactical aircraft.⁴² While airmen are experts of their domain, exploitation of that domain alone is insufficient to win a war against a committed near-peer adversary conducting anti-access maritime warfare.

IMPLICATIONS AND CONCLUSIONS

Exposing the limitations of service doctrine does little to aid the JFC in establishing command relationships. The questions that truly need answering are 1) what elements of combat power can the JFC bring to bear against the near-peer adversary executing anti-access maritime warfare, 2) which component commander controls the preponderance of that power, and 3) to what end should that power be employed? As we have seen, initially the JFC is limited to land- and sea-based air, enhanced by submarine-launched cruise missiles, but operated in insufficient quantity (due to the vast distances it must operate across) to unilaterally achieve campaign objectives.⁴³ Also, it is initially airpower, via airborne ISR, that is providing the JFC with his situational awareness, despite the fact that this information

⁴¹ Lemay Center, *Countersea Operations*, 34. The Air Force has focused its air to ground weapons effort on hitting fixed are semi-fixed targets with coordinate-seeking satellite guided bombs. While the service is attempting to rectify this shortcoming, it presently has few options for targeting moving ships in poor weather.

⁴² ALSA, *Air Operations in Maritime Surface Warfare*, 24 and 31.

⁴³ Lambeth, *The Transformation...*, 300. Lambeth makes the point that carrier based airpower is never large enough in scope to accomplish campaign objectives, and that only land-based air supported by naval and Marine air forces can accomplish this. This concept is extended to the situations described in this discussion due to the reduction in effectiveness of all joint airpower cause by China's anti-access measures.

may be limited in scope to surface and air pictures and degraded by electronic attack.

Therefore, the weight of the JFC's combat effort will initially be accomplished by airpower, controlled by the JFACC, and thus the JFACC should initially be named the supported commander. Naval fires in the form of cruise missile strikes will also be tightly controlled by the CAOC via the Tomahawk Strike Coordinator.⁴⁴ As the maritime component is not participating in a decisive engagement, the air component sets the priorities and timing of the joint effort.⁴⁵ And as one observer writes, "the JFACC alone can conduct significant combat operations in areas that lie beyond the [reach of other] commanders."⁴⁶ Ironically, it is the Navy, via "Navy Joint Principles", that makes the best argument to support the concept of the JFACC as the supported commander

The supported commander in the joint force translates the CJTF's desired effects into a planned operation or series of operations. Typically, the selection of a supported commander is based on the component's familiarity and *control of the battlespace in question and preponderance of assets*.⁴⁷

However, as we have seen, airpower alone cannot win the war described above, and thus the objectives of the JFACC must be specific, closely controlled, and complementary to the JFC's overall operational concept. Specifically, airpower should be used not to directly confront the adversary's conventional forces symmetrically (though that will probably be necessary), but rather to disrupt, disable, or destroy the ability of the adversary to maintain a *maritime* anti-access capability. The primary target in this effort should be the main operational center of gravity of the Chinese anti-access strategy: the Chinese ASBM capability. While the specific methods used by air and space power to counter this threat exceed both the scope and classification of this discussion, suffice it to say that targets may

⁴⁴ Lemay Center, *Countersea Operations*, 5.

⁴⁵ Winnefeld and Johnson, *Joint Air Operations...*, 152.

⁴⁶ Stambaugh, "JFACC: Key to Organizing..." 7.

⁴⁷ COMPACFLT, "Navy Joint Principles", 3, emphasis added by this author.

range from the DF-21 launch sites and missiles themselves to the land- and spaced-based surveillance and targeting assets that support them. Direct engagement with Chinese conventional forces should be limited to only that which is required to accomplish the main objective of targeting the ASBM capability.

With the decisive point of countering the Chinese ASBM capability achieved, and the nature of the war fundamentally changed enabling the joint force to seize the initiative, objectives and command relationships will shift. **At this point the JFC should name the JFMCC the supported commander, and the JFMCC should seek a decisive engagement with adversary naval forces.** Such a shift is not unprecedented, and joint doctrine states that support relationships and the responsibilities and authorities of the component commanders may shift during the campaign as directed by the JFC.⁴⁸ Land based airpower, augmented by naval air forces as carrier strike groups move west, should shift focus to the second tier maritime anti-access capability, the ASCM, by targeting assets capable of launching these weapons. With friendly naval forces in place, the JFMCC can begin conducting direct engagement against adversary surface strike groups and amphibious assault forces. It should be noted airpower may still be accomplishing the weight of this effort – and the JFACC may still maintain tactical control (TACON) of the allocated aircraft – but these operations will be conducted to support the JFMCC’s priorities and the JFMCC will set the overall timing and sequence of operations.

FINAL OBSERVATIONS AND RECOMMENDATIONS

The warfare described above, and the conclusions regarding command relationships reached from it, are a product of the situation that exists *right now*. Clearly, the limited

⁴⁸ Chairman, U.S. Joint Chiefs of Staff, *Doctrine for the Armed Forces of the United States*, Joint Publication (JP) 1 (Washington, DC: CJCS, 20 March 2009), section IV, para 9a; and idem *Joint Operations*, Joint Publication (JP) 3-0 (Washington, DC: CJCS 13 February 2008), para 4/c/2/e.

ability of the joint force to leverage combat power against a near-peer adversary in high intensity anti-access maritime conflict is undesirable, and both the Air Force and the Navy must take proactive steps to alter the balance of power against near-peer competitors with rapidly increasing military capabilities. First of all, both services should consider countering the advanced ballistic missile as a top (if not *the top*) priority. Expanding current BMD capabilities to counter this threat will benefit both ships at sea and land-based air forces deployed in theater. Furthermore, simple and cheap countermeasures, such as radar obscurants capable of rapidly and pervasively masking entire ships, should not be ignored in favor of expensive, complicated, and risky kinetic defense measures.⁴⁹ The Navy should pursue development of weapons and systems more capable of operating in shallow waters, and both services should renew their emphasis on long range, low observable, land strike weapons. Finally, both services must take a vested interest in the looming aerial refueling crisis, caused by delays in the procurement of the next Air Force tanker.

Also of note, the analysis in this paper was conducted against a specific scenario, China versus Taiwan, and the specifics of this notional conflict may not apply to every campaign conducted against an anti-access strategy. However, the conclusions, reduced to their most basic form, still apply. In a scenario where anti-access measures permit the joint force to bring only a portion of its capability to bear, the component commander that controls the preponderance of that capability should be named the supported commander. Furthermore, if that fraction of joint force power employed is incapable of unilaterally accomplishing campaign objectives, the supported commander must focus effort to disrupt, deny, or destroy those aspects of the enemy's anti-access capability that hold the weight of

⁴⁹ For details of one option, reference the M56 Coyote obscurant system, at <http://www.fas.org/man/dod-101/sys/land/m56.htm>.

the joint force at risk. Once this is accomplished, the JFC can shift command relationships and seek a decisive victory.

Given that command relationships will, by design, shift during the campaign, combatant commanders faced with possible conflict against a near-peer adversary executing anti-access maritime warfare must publish clear guidance on command support relationships, combatant commander's objectives, and criteria for a shift of command relationships. Furthermore, the combatant commander must ensure the protocols used to establish, shift, and re-establish command relationships are regularly practiced, evaluated, and refined. To help facilitate this, combatant commanders should name as deputies to functional component commanders officers from another service, such as a Navy admiral serving as deputy to an Air Force JFACC.⁵⁰ Finally, senior leaders at all levels must champion a change of mentality, and consider "access assurance" as the true prerequisite for success in any military operation, perhaps replacing more traditional, and often parochial, approaches such as air superiority or sea control. Only when anti-access measures are defeated can the joint force seize the initiative, bring decisive power to bear, and achieve victory against a near-peer adversary.

⁵⁰ Winnefeld and Johnson, *Joint Air Operations*, 170.

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